

What is claimed is:

- Sub
Q20
- 09914103 "082201
T02280" E044560
1. A rectifier of thermally moving electrons comprising:
 - a first metal layer;
 - an electron movement barrier layer contacting said first metal layer;
 - a dispersed layer of minute metal particles in which said particles are uniformly dispersed, said dispersed layer contacting with said electron movement barrier layer;
 - a semiconductor layer contacting with said dispersed layer of minute metal particles;
 - an ohmic layer contacting with said semiconductor layer; and
 - a second metal layer contacting with said ohmic layer, said second metal layer being comprised of an aggregate of minute rectifying surfaces.
 2. A rectifier of thermally moving electrons comprising minute rectifying surfaces having same rectifying direction, said rectifying surfaces being electrically insulated from each other, and said rectifying surfaces are in incomplete conductive state (barrier state) with one collimating electrode.
 3. A method for converting thermal energy into electric energy by rectifying thermally moving electrons by utilizing a rectifier of thermally moving electrons.
- Qdd
Q21